

4 4. (New) A customizable application system comprising:
5 an internet application system configured to support an internet application, the internet
6 application associated with metadata configured for use in generating an
7 application user interface including a user interface element, the internet
8 application system including,
9 a) a user interface generator configured to generate the application user
10 interface using the metadata, and
11 b) a web application server configured to deliver the application user
12 interface to a client;
13 an application development system configured to generate the metadata, the metadata
14 being further configured to characterize a user customizable immediate access
15 keystroke combination associated with the user interface element;
16 a configuration system including a configuration engine and a configuration interface, the
17 configuration interface configured to modify configuration data further
18 characterizing the customizable immediate access keystroke combination; and
19 a data repository including a data record for storing the configuration data, the data
20 record being accessible using the metadata.

1 5. (New) An application development system for developing an internet application having an
2 application user interface, the application development system comprising:
3 an integrated development environment configured for specifying a user interface
4 element in the application user interface, the user interface element having a user
5 customizable immediate access keystroke combination; and
6 an application designer configured to produce metadata to characterize the customizable
7 immediate access keystroke combination.

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Cmt 1 6. (New) The application development system of claim 5, wherein the immediate access
2 keystroke combination is a hotkey keystroke combination.

1 7. (New) The application development system of claim 5, wherein the immediate access
2 keystroke combination is responsive to the identity of a user.

1 8. (New) A customizable application system for developing an application user interface
2 associated with an internet application comprising:
3 an integrated development environment configured for a developer to specify a user
4 interface element in the application user interface, the user interface element
5 having a user customizable immediate access keystroke combination;
6 an application designer configured to produce metadata characterizing the user
7 customizable immediate access keystroke combination; and
8 a data repository including a data record accessible using the metadata, the data record
9 being user modifiable and being configured to store data used to further
10 characterize the customizable immediate access keystroke combination.

1 9. (New) The customizable application system of claim 8, wherein the user customizable
2 immediate access keystroke combination is a hotkey keystroke combination.

1 10. (New) The customizable application system of claim 8, wherein the user customizable
2 immediate access keystroke combination is configurable according to the identity of a
3 user.

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Cmt 1 11. (New) The customizable application system of claim 8, wherein the data record is user
2 modifiable using a configuration system.

1 12. (New) The customizable application system of claim 8, wherein the data record is user
2 modifiable using a personalization system.

1 13. (New) The customizable application system of claim 12, wherein the personalization system
2 is integrated into the internet application.

1 14. (New) An application execution system comprising:

2 an internet application system configured to support an internet application, the internet
3 application system including a query processor configured to query a data
4 repository, the data repository including a user modifiable data record configured
5 to store data characterizing a user customizable immediate access keystroke
6 combination;

7 an application user interface including a user interface element, the application user
8 interface configured as an interface between the internet application and a user,
9 the user interface element including the user customizable immediate access
10 keystroke combination, the user interface element configured for delivery to a
11 client over a computer network; and

12 metadata further characterizing the customizable immediate access keystroke
13 combination.

1 15. (New) The application execution system of claim 14, wherein the client supports the
2 application user interface using standard web browser protocols.

1 16. (New) The application execution system of claim 14, wherein the client supports the
2 application user interface using features of a web browser, the features not requiring a
3 browser add-on, plug-in, or extension.

1 17. (New) The application execution system of claim 14, further including a personalization
2 system configured to modify the user modifiable data record.

1 18. (New) The application execution system of claim 17, wherein the personalization system is
2 included in the internet application.

1 19. (New) An internet application system comprising:

2 a user interface generator configured to generate a user interface including a user
3 interface element, the user interface being compatible with a standard web
4 browser and being generated in response to a request from a user, the user
5 interface element including a user customizable immediate access keystroke
6 combination;

7 a web application server configured to deliver the user interface to a client; and
8 an internet application accessible to the user through the generated user interface.

1 20. (New) The internet application system of claim 19, wherein the user interface generator is
2 further configured to use metadata to characterize the user customizable immediate
3 access keystroke combination.

1 21. (New) The internet application system of claim 19, wherein the user customizable immediate
2 access keystroke combination is a hotkey keystroke combination.

1 22. (New) The internet application system of claim 19, wherein the user interface generator is
2 further configured to use a user modifiable data record to characterize the user
3 customizable immediate access keystroke combination.

1 23. (New) The internet application system of claim 19, further including means for accessing a
2 user-modifiable data record including data characterizing the user customizable
3 immediate access keystroke combination.

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Cm. x 1 24. (New) The internet application system of claim 19, wherein the internet application includes
2 a configuration system configured to modify data characterizing the user customizable
3 immediate access keystroke combination.

1 25. (New) The internet application system of claim 19, wherein the client is a wireless system.

1 26. (New) The internet application system of claim 19, wherein the client is a programmable
2 device configured to support standard web browser protocols.

1 27. (New) An internet application comprising:

2 an application user interface including a user interface element with a user customizable
3 immediate access keystroke combination, the application user interface
4 configured for delivery to a client and configured to operate as an interface
5 between a user and the internet application;

6 a user modifiable data record stored in a location physically remote from the client, the
7 user modifiable data record configurable for use by a user interface generator to
8 generate the application user interface, the user modifiable data record further
9 configurable to characterize the user customizable immediate access keystroke
10 combination; and

11 metadata configurable for use by the user interface generator to access the user
12 modifiable data record.

1 28. (New) The internet application of claim 27, wherein the user customizable immediate access
2 keystroke combination is a hotkey keystroke combination.

1 29. (New) The internet application of claim 28, wherein the user modifiable data record is further
2 configurable such that generation of the application user interface is responsive to an
3 identity of the client.

1 30. (New) The internet application of claim 27, wherein the user modifiable data record is
2 configurable using a configuration interface.

1 31. (New) The internet application of claim 27, wherein the user modifiable data record is further
2 configurable such that generation of the application user interface is responsive to an
3 identity of the user.

1 32. (New) An application user interface between a user and an internet application, the
2 application user interface including a user interface element, the application user interface
3 being generated using metadata and being configured for display using a standard web
4 browser, the user interface element including a user customizable immediate access
5 keystroke combination characterized by a value stored in a user modifiable data record,
6 the metadata being configured to access the user modifiable data record.

1 33. (New) The application user interface of claim 32, wherein the metadata being configured to
2 access the user modifiable data record is responsive to an identity of a client or an
3 identity of the user.

1 34. (New) The application user interface of claim 32, wherein the customizable immediate
2 access keystroke combination is a hotkey keystroke combination.

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1 35. (New) A method of developing a customizable user interface element for inclusion in an
2 application user interface, the method comprising the steps of:
3 developing a user interface element;
4 specifying a customizable property of the user interface element, the customizable
5 property including a user customizable immediate access keystroke combination;
6 determining a data record for holding a value configured to characterize the user
7 customizable immediate access keystroke combination, the data record being
8 stored in a data repository and being user modifiable, the data repository being
9 physically remote from a client used to display the application user interface, the
10 application user interface being for accessing an internet application;
11 generating metadata further characterizing the user customizable immediate access
12 keystroke combination, the metadata including a reference to the data record; and
13 storing the metadata in association with the user interface element.

1 36. (New) The method of claim 35, wherein the user customizable immediate access keystroke
2 combination is a hotkey keystroke combination.

1 37. (New) The method of claim 36, wherein the step of specifying a customizable property is
2 performed using an integrated development environment.

1 38. (New) The method of claim 36, wherein the internet application includes a configuration
2 system configured to modify the data record.

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1 39. (New) A method of generating a customizable application user interface, the method
2 comprising the steps of:
3 accessing a page definition, the page definition including metadata for characterizing a
4 user customizable immediate access keystroke combination;
5 accessing a data record using the metadata, the data record being stored in a data
6 repository and being user modifiable, the data repository being physically remote
7 from a client used to display the user customizable application user interface;
8 determining a value characterizing the user customizable immediate access keystroke
9 combination using information stored in the data record;
10 generating markup-language responsive to the determined value; and
11 including the generated markup-language in an application user interface.

1 40. (New) The method of claim 39, wherein the customizable application user interface is a user
2 interface to an internet application.

1 41. (New) The method of claim 40, further including a step of modifying the data record using a
2 configuration system.

1 42. (New) The method of claim 40, wherein the step of accessing a data record using the
2 metadata is responsive to the identity of a user.

1 43. (New) The method of claim 40, wherein the user customizable immediate access keystroke
2 combination is a hotkey keystroke combination.

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1 44. (New) A method of developing an HTML based interface between a user and an application,
2 the method comprising the steps of:
3 selecting a user interface element, the user interface element including a user
4 customizable immediate access keystroke combination;
5 associating the user interface element with a data record, the data record being stored in a
6 data repository and being user modifiable;
7 including the user interface element in the interface;
8 generating metadata characterizing the user customizable immediate access keystroke
9 combination, the metadata being for accessing the data record; and
10 storing the metadata in association with the application.

1 45. (New) The method of claim 44, wherein the application is an internet application.

1 46. (New) The method of claim 45, wherein the metadata is configured to access the data record
2 responsive to an identity of a user of the application.

1 47. (New) The method of claim 45, wherein the customizable immediate access keystroke
2 combination is a hotkey keystroke combination.

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1 48. (New) A method of customizing an immediate access keystroke combination in an HTML
2 based application user interface for accessing an internet application, the method
3 comprising the steps of:
4 accessing a configuration system, the configuration system including a configuration
5 engine and a configuration interface;
6 selecting, using the configuration interface, the immediate access keystroke combination
7 of a user interface element in the HTML based application user interface, the
8 immediate access keystroke combination being user customizable; and
9 specifying configuration data using the configuration interface, the configuration data
10 characterizing the immediate access keystroke combination and the configuration
11 data being stored in a data repository physically remote from a client used to
12 display the HTML based application user interface.

1 49. (New) The method of claim 48, wherein the immediate access keystroke combination is a
2 hotkey keystroke combination.

1 50. (New) The method of claim 48, wherein configuration data is configured to characterize the
2 immediate access keystroke combination responsive to an identity of a user of the
3 internet application.

1 51. (New) The method of claim 48, further including a step of modifying the configuration data
2 using a personalization system.

1 52. (New) The method of claim 48, wherein the HTML based application user interface is
2 displayed at the client without requiring a browser add-on, plug-in, or extension.

1 53. (New) A method of customizing an immediate access keystroke combination in an
2 application user interface, the method comprising the steps of:
3 accessing a configuration system, the configuration system including a configuration
4 engine and a configuration interface;
5 selecting, using the configuration interface, an immediate access keystroke combination
6 of a user interface element in an application user interface, the immediate access
7 keystroke combination being user customizable;
8 specifying configuration data using the configuration interface, the configuration data
9 characterizing the immediate access keystroke combination; and
10 generating the application user interface using the specified configuration data, the
11 application user interface being associated with an internet application.

1 54. (New) The method of claim 53, further including a step of displaying the application user
2 interface using standard web browser protocols.

1 55. (New) The method of claim 53, wherein the immediate access keystroke combination is a
2 hotkey keystroke combination.

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1 56. (New) A method of executing an internet application comprising the steps of:
2 receiving a request for an application user interface from a client, the application user
3 interface including a user interface element;
4 accessing a page definition, the page definition including metadata characterizing the
5 requested application user interface;
6 retrieving, using the metadata, a value characterizing a user customizable immediate
7 access keystroke combination of the user interface element, the value being stored
8 in a data repository physically remote from the client;
9 generating HTML responsive to the retrieved value;
10 including the generated HTML in the requested application user interface; and
11 delivering the requested user interface to the client, the requested application user
12 interface being an interface between a user and the internet application.

1 57. (New) The method of claim 56, wherein the user customizable immediate access keystroke
2 combination is a hotkey keystroke combination.

1 58. (New) The method of claim 56, wherein the retrieved value is personalization data.

1 59. (New) The method of claim 56, further including a step of displaying the application user
2 interface on the client using standard web browser protocols.

1 60. (New) The method of claim 56, further including the step of identifying the requestor,
2 wherein the step of retrieving a value is responsive to the identity of the requester.

1 61. (New) The method of claim 56, wherein the step of retrieving a value is responsive to
2 inclusion of the application user interface in an application component.

1 62. (New) A method of generating an application user interface including a user customizable
2 immediate access keystroke combination, the method comprising the steps of:
3 accessing a page definition, the page definition including metadata associated with the
4 user customizable immediate access keystroke combination;
5 reading data from a data record using the metadata, the data record being stored in a data
6 repository and being user modifiable, the data repository being physically remote
7 from a client used to display the application user interface;
8 determining a value characterizing the user customizable immediate access keystroke
9 combination using the data read from the data record;
10 generating HTML responsive to the determined value; and
11 including the generated HTML in the application user interface, the application user
12 interface being for accessing an internet application.

1 63. (New) The method of claim 62, wherein the user customizable immediate access keystroke
2 combination is a hotkey keystroke combination.

1 64. (New) The method of claim 62, wherein the data record includes personalization data.

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- 1 65. (New) The method of claim 62, further comprising:
 - 2 delivering the application user interface to the client; and
 - 3 displaying the application user interface at the client using standard web browser
 - 4 protocols.
- 1 66. (New) The method of claim 62, further including identifying the client, wherein the step of
 - 2 reading data is responsive to the identity of the client.
- 1 67. (New) The method of claim 62, further including a step of identifying a user, wherein the
 - 2 step of reading data is responsive to the identity of the user.

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68. (New) A method of generating a user customizable application user interface configured for delivery from a server to a client, the method comprising the steps of:

receiving a request for the user customizable application user interface from a requestor, the user customizable application user interface including a user interface element;

identifying the requester of the user customizable application user interface;

accessing a page definition, the page definition including metadata characterizing the requested user customizable application user interface;

retrieving a value characterizing a customizable immediate access keystroke combination included in the user interface element, using the metadata and the identity of the requester, the value being user modifiable and being stored in a data repository physically remote from the client;

generating HTML responsive to the value;

including the generated HTML in the requested user customizable application user interface; and

delivering the requested user customizable application user interface to the client.

69. (New) The method of claim 68, wherein the customizable immediate access keystroke combination is a customizable hotkey keystroke combination.

70. (New) The method of claim 68, further including displaying the user customizable application user interface using standard web browser protocols.

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71. (New) A computer readable medium including an internet application, the internet application comprising:
metadata defining an application user interface, the application user interface including a user interface element with a user customizable immediate access keystroke combination, the application user interface configured for delivery to a client and configured to operate as an interface between a user and the internet application;
a user interface generator configured to generate the application user interface using a user modifiable data record stored in a location physically remote from the client, the user modifiable data record configurable to characterize the user customizable immediate access keystroke combination; and
a configuration system configured for a user to modify the user modifiable data record.

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1 72. (New) A computer readable medium including an internet application, the internet
2 application comprising:
3 an application designer configured to develop an application user interface, the
4 application user interface including a user interface element with a user
5 customizable immediate access keystroke combination, the application user
6 interface configured for delivery to a client and configured to operate as an
7 interface between a user and the internet application;
8 a user interface generator configured to generate the application user interface using a
9 user modifiable data record stored in a location physically remote from the client,
10 the user modifiable data record configurable to characterize the user customizable
11 immediate access keystroke combination; and
12 a configuration system configured for a user to modify the user modifiable data record.

1 73. (New) An application execution system comprising:
2 means for supporting an internet application;
3 means for generating an application user interface using a user modifiable data record
4 configured to store data characterizing a user customizable immediate access
5 keystroke combination; and
6 means for providing the application user interface to a user, the application user interface
7 including a user interface element, the application user interface configured as an
8 interface between the internet application and the user, the user interface element
9 including the user customizable immediate access keystroke combination, the user
10 interface element configured for delivery to a client over a computer network.